

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A moving-image holographic reproducing device comprising:

(a) a computer configured to create a hologram from three-dimensional coordinate data of a three-dimensional object which is externally obtained;

(b) a reflective liquid crystal display connected to the computer and configured to display the hologram;

(c) a light-emitting diode array functioning as a light source;

(d) a half mirror; and

(e) a pinhole filter and a collimator lens disposed between the light-emitting diode array and the half mirror,

wherein a reconstructed three-dimensional image is displayed by converting light emitted from the light-emitting diode array into a parallel light by the pinhole filter and the collimator lens, and illuminating the reflective liquid crystal display with the parallel light through the half mirror,

the light emitting diode array including three light-emitting diodes arranged respectively on a two-dimensional grid pattern,

the parallel light is formed from three light-emitting diodes emitting three primary colors of light, red (R), green (G), and blue (B) at the same time, the colors of light being incident on the half mirror ~~spatially offset from each other to produce images of the corresponding colors,~~ and

the reconstructed three-dimensional image comprises a color image formed by combining the images of the corresponding colors.

Claim 2 (Canceled).

Claim 3 (Canceled).

Claim 4 (Previously Presented): The moving-image holographic reproducing device according to Claim 1, further comprising a field lens disposed between the half mirror and an observer.

Claim 5 (Previously Presented): The moving-image holographic reproducing device according to Claim 1, further comprising a dedicated high-speed parallel distributed processing system comprising a plurality of dedicated Large Scale Integrator LSIs between the computer and the reflective liquid crystal display.

Claim 6 (Original): The moving-image holographic reproducing device according to Claim 5, wherein the dedicated high-speed parallel distributed processing system further comprises a shared memory for storing coordinates of an object and the plurality of dedicated LSIs configured in parallel.

Claim 7 (Currently Amended): A color moving-image holographic reproducing device comprising:

- (a) a computer configured to create a computer-generated hologram from three-dimensional coordinate data of a three-dimensional object which is externally obtained;
- (b) a reflective liquid crystal display connected to the computer and configured to display the-computer-generated hologram;
- (c) a half mirror configured to project the displayed computer-generated hologram;

(d) three light-emitting diodes of primary colors red (R), green (G), and blue (B) (LEDs) functioning as reference light source; and

(e) the LEDs arranged on a two dimensional grid pattern and respectively emitting primary colors of light, red (R), green (G), and blue (B), at the same time;

wherein optical axes of color light beams from the LEDs are shifted from each other, the light beams are projected to the half mirror spatially shifted from each other and onto the reflective liquid crystal display, and a color holographic image is formed computer-generated hologram.

Claim 8 (Original): The color moving-image holographic reproducing device according to Claim 7, wherein the R, G, and B LEDs are arranged in proximity to each other.

Claim 9 (Previously Presented): The color moving-image holographic reproducing device according to Claim 8, wherein a first LED of the R, G, and B LEDs is disposed in the vicinity of a second LED in the X direction and a third LED is disposed in the vicinity of the second LED in the Y direction orthogonal to the X direction.

Claim 10 (Original): The color moving-image holographic reproducing device according to Claim 9, wherein each of the R, G, and B LEDs has a pinhole filter and emits light to a collimator lens to generate parallel light, and the half mirror is illuminated with the parallel light.

Claim 11 (Original): The color moving-image holographic reproducing device according to Claim 10, wherein the size of a color reconstruction area is determined in accordance with a distance d_1 between the LEDs, a distance d_2 between the pinhole filter and

Application No. 10/500,461

Reply to Office Action of October 16, 2006

the collimator lens, and a distance d_3 between the reflective liquid crystal display and a field lens that produces a reconstructed image.